

## Pertussis Antibiotic Recommendations for Treatment and Prophylaxis

1 October, 2004

The Centers for Disease Control and Prevention and the American Academy of Pediatrics currently recommend azithromycin, clarithromycin, erythromycin or trimethoprim/sulfamethoxazole as the drugs of choice for treatment of diagnosed cases and prophylaxis of household/close contacts, **regardless of age or immunization status**. The antimicrobial agents and dosages used for chemo-prophlylaxis of contacts are the same as that recommended for treatment of a clinical case, and are listed below. *For additional information, call your local health department*, or see www.milwaukee.gov/health, or call the Milwaukee Health Dept. Pertussis Hotline at 414-286-3616.

## **Azithromycin and Clarithomycin**

Azithromycin: 10-12 mg/kg/day orally in one dose for 5 days; maximum of 600 mg/day for 5 days

(i.e., adult dose is 500-600 mg once daily for 5 days). *Note: a "Zithromax Z-pack"* (500mg x1d, then 250mg/d x4d) is not yet CDC-approved but may be sufficient.

Clarithromycin: 15-20 mg/kg/day orally in two divided doses for 7 days; maximum of 1g/day for 7

days (i.e., adult dose is 500mg bid for 7 days). Note: Clarithromycin 250mg bid

for 7 days is not yet CDC-approved but may be sufficient.

## Erythromycin estolate\*

For children: 40-50 mg/kg per day orally in 4 divided doses for 14 days

For adults: 1 to 2 g/day orally in 4 divided doses for 14 days (i.e., 250-500mg qid x14d - -

500mg qid is preferred if tolerated)

**Trimethoprim-Sulfamethoxazole (TMP-SMZ)** (Recommended for treatment and prophylaxis for patients who cannot tolerate erythromycin or other macrolides)

For children: trimethoprim 8 mg/kg/day, sulfamethoxazole 40 mg/kg/day in two divided doses for

14 days

For adults: trimethoprim 320 mg/day, sulfamethoxazole 1600 mg/day in two divided doses for

14 days (e.g., Bactrim DS one bid for 14 days)

Pertussis immunity is not 100%, tends to decline with age, and may not prevent infection. Older children and adults with mild illness can transmit the infection. Therefore, all cases and their household/close contacts should receive antibiotics as above regardless of age or immunization status. *Prophylaxis must be continued for the full course.* Symptomatic children and/or adults may return to school or work after completing the first 5 days of medication but *the full course of treatment must be completed* (exception: symptomatic individuals may be released from isolation and have the option to discontinue antibiotic treatment if their PCR result returns negative).

\*Note: The estolate form of erythromycin is the recommended form, because it may be more effective than other forms in eliminating nasal carriage of *B. pertussis*. If azithromycin, clarithromycin, and erythromycin estolate are all unavailable to the patient, other forms of erythromycin may be used as alternatives and would be preferred over TMP-SMZ. Dosage for erythromycin base or stearate is the same as for the estolate form. Dosing for erythromycin ethylsuccinate for pertussis treatment or prophylaxis for adults is 800 mg three times daily for 14 days, and for children is 80-100 mg/kg/day divided into q8hr or q6hr dosing (i.e., 20-25 mg/kg/dose given gid, OR 25-35mg/kg/dose given tid).

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